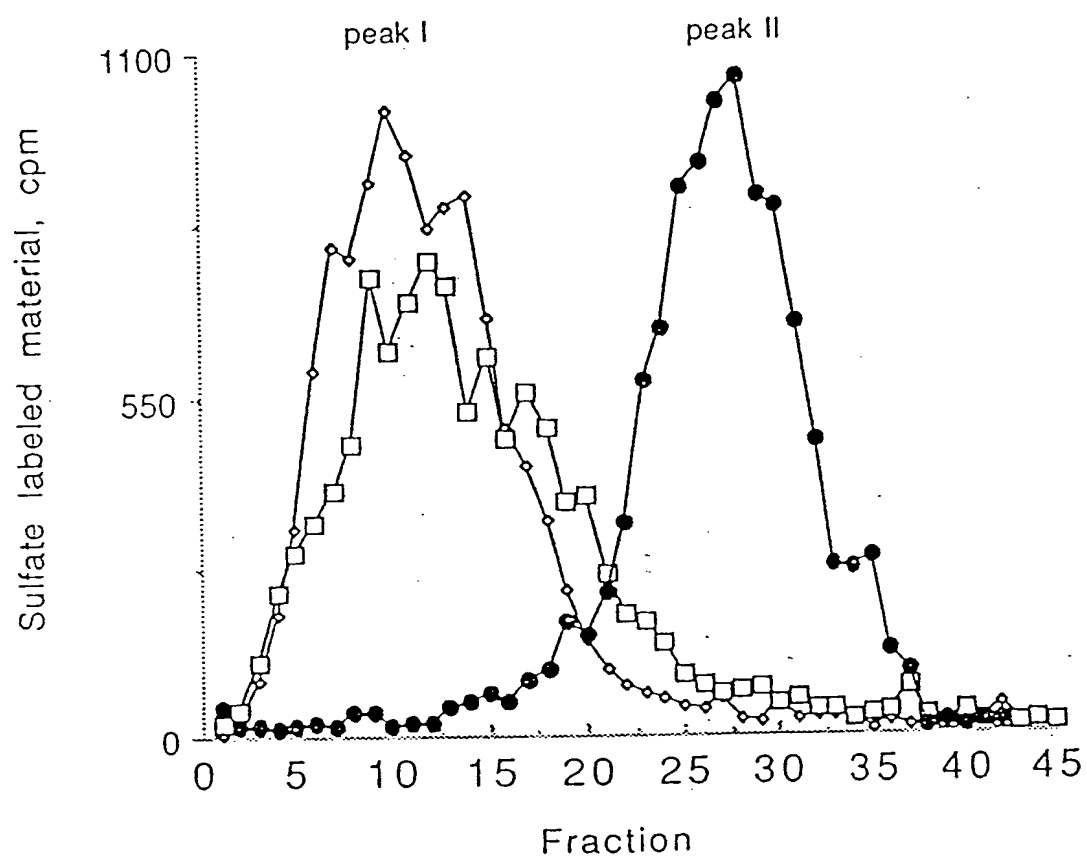


| Run | Time | Temp | Pressure | Flow | Conc | Yield | Quality |
|-----|-------|-------|----------|-----------|-------|-------|---------|
| 1 | 10:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 2 | 10:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 3 | 11:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 4 | 11:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 5 | 12:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 6 | 12:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 7 | 13:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 8 | 13:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 9 | 14:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 10 | 14:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 11 | 15:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 12 | 15:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 13 | 16:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 14 | 16:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 15 | 17:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 16 | 17:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 17 | 18:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 18 | 18:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 19 | 19:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 20 | 19:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 21 | 20:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 22 | 20:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 23 | 21:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 24 | 21:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 25 | 22:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 26 | 22:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 27 | 23:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 28 | 23:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 29 | 00:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 30 | 00:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 31 | 01:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 32 | 01:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 33 | 02:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 34 | 02:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 35 | 03:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 36 | 03:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 37 | 04:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 38 | 04:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 39 | 05:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 40 | 05:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 41 | 06:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 42 | 06:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 43 | 07:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 44 | 07:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 45 | 08:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 46 | 08:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 47 | 09:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 48 | 09:30 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 49 | 10:00 | 100°C | 1.0 atm | 1.0 L/min | 0.1 M | 95% | High |
| 5 | | | | | | | |

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61 AGATGCTGCTGCGCTCGAAGCCTGCGCTGCCGCGCCGCGCTGATGCTGCTGCTCCTGGGCG
M L L R S K P A L P P P L M L L L L G P
121 CGCTGGGTCCTCTCCCTTGGCGCCCTGCCCGGACCTGCGCAAGCACAGGACGTCGTGG
L G P L S P G A L P R P A Q A Q D V V D
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721 GGGACTAGGCTATGAACCTAACAGTTTCTTAAGAGGCTGATATTTCTCATATGGT
E L G N E P N S F L K K A D I F I N G S
(T)
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Q L G E D Y I Q L H K L L R K S T F K N
(F)
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N G R T A T R E D F L N P D V L D I F I
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1621 GTTATTTTAAATTTGCAAGCTTCTCATATAGTTTTTTTGTGATAAGAAATGCAAAATTTG
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Fig. 2



Sulfate labeled material, cpm

peak II

Fraction

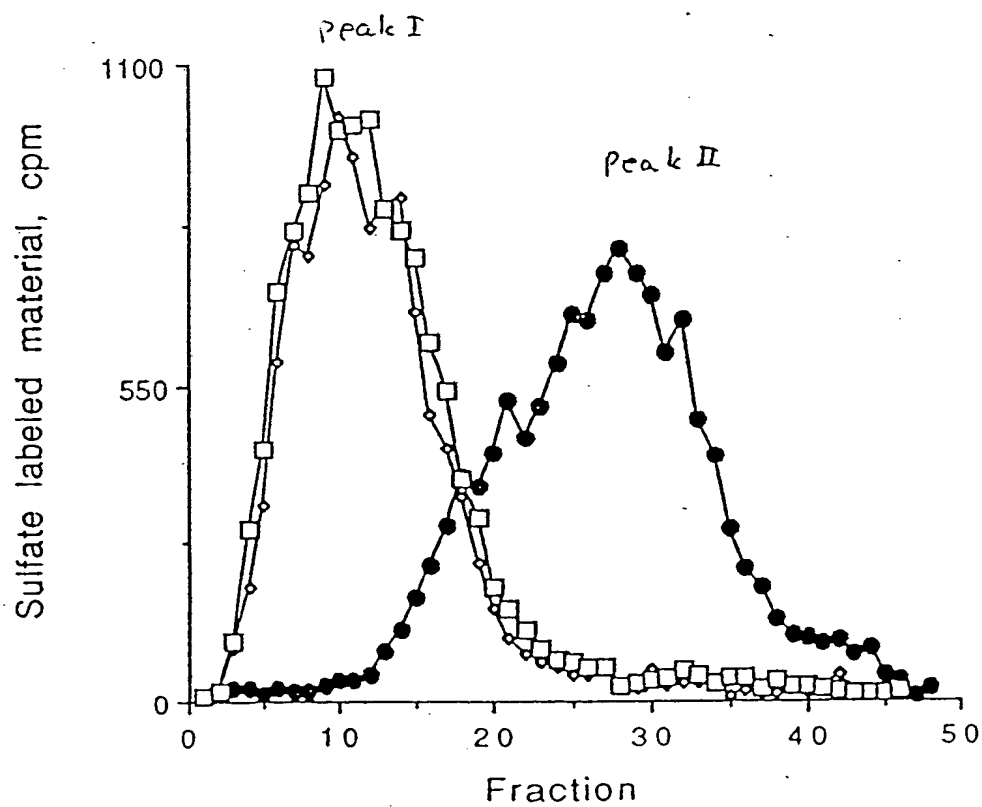
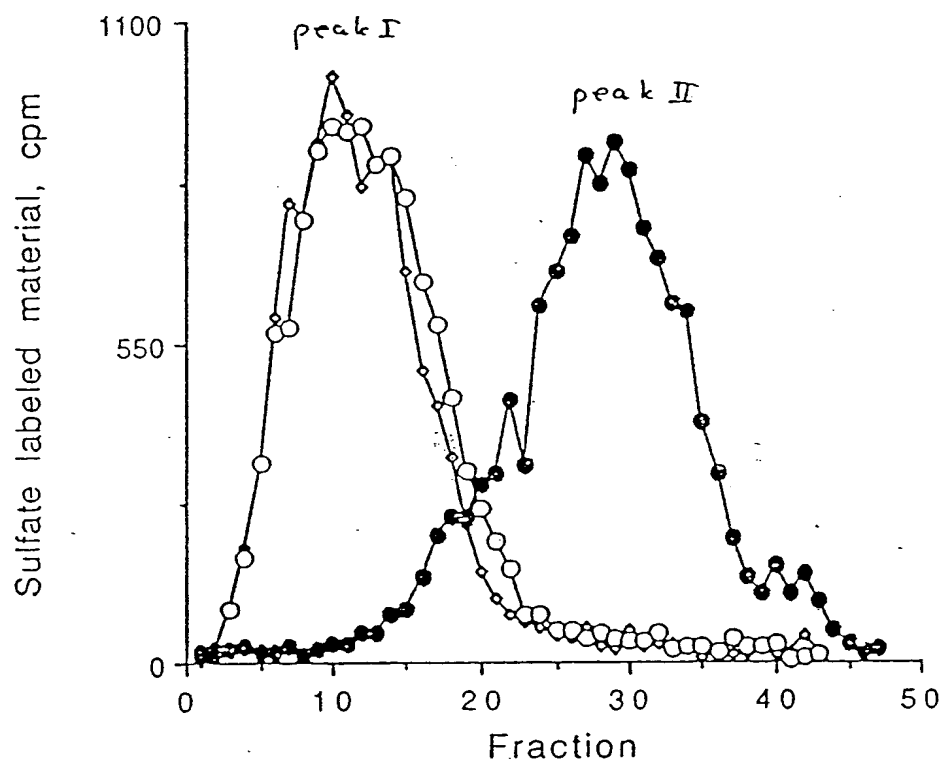


Fig. 3B

Fig. 4



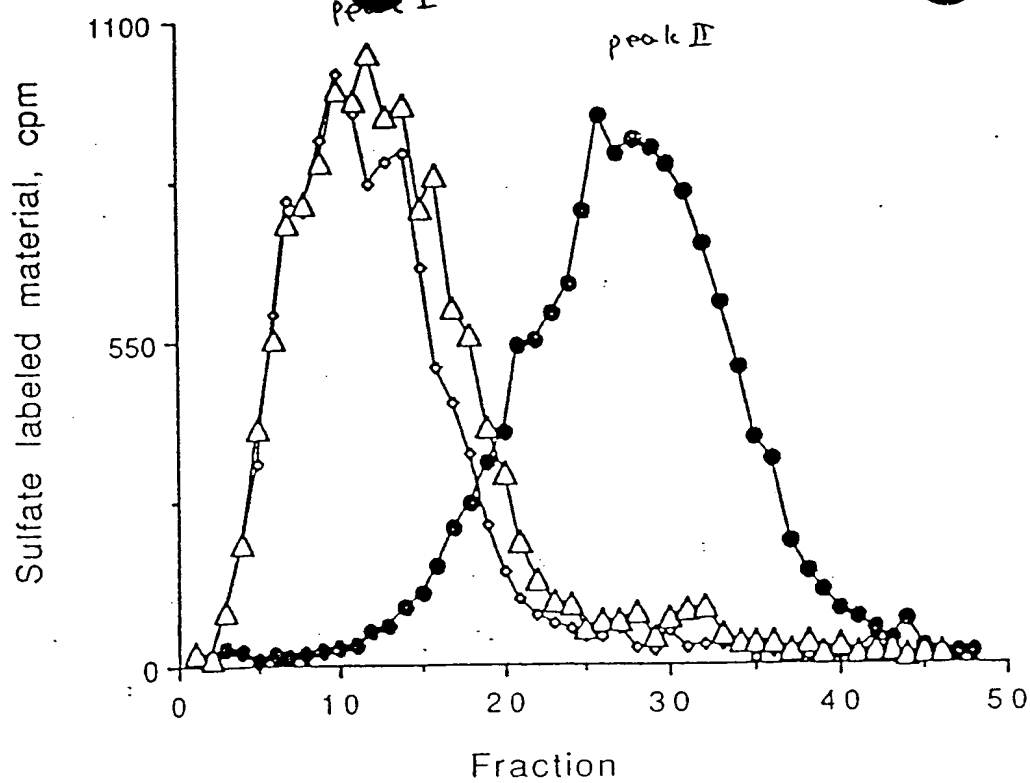


Fig. SA

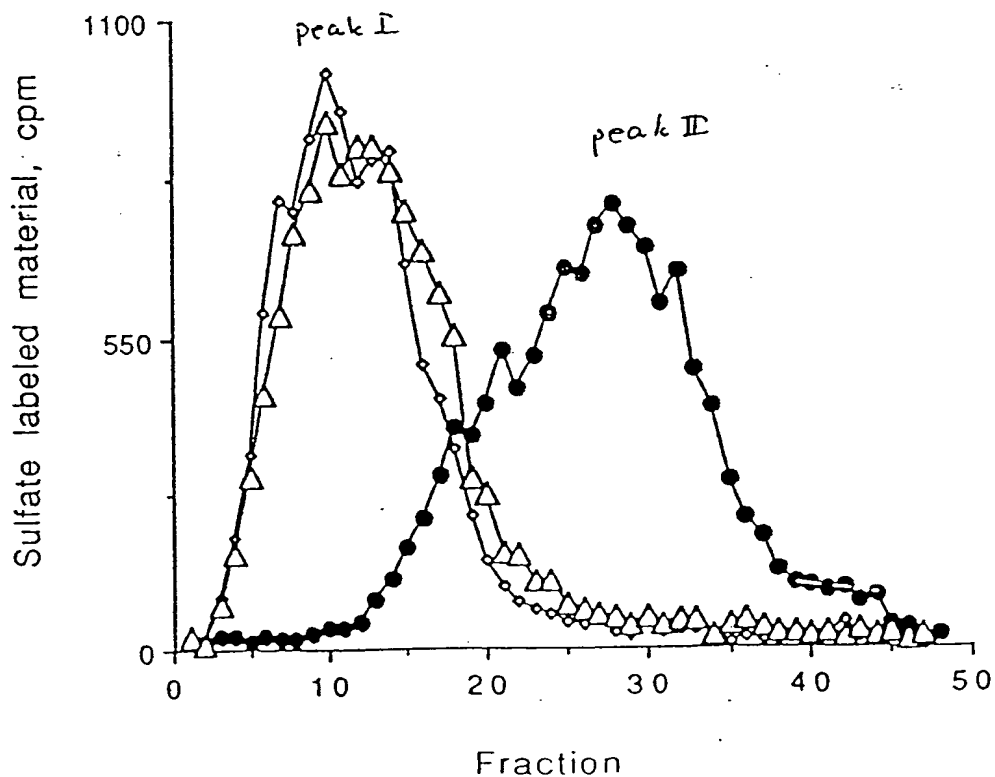


Fig. SB

11-29-66

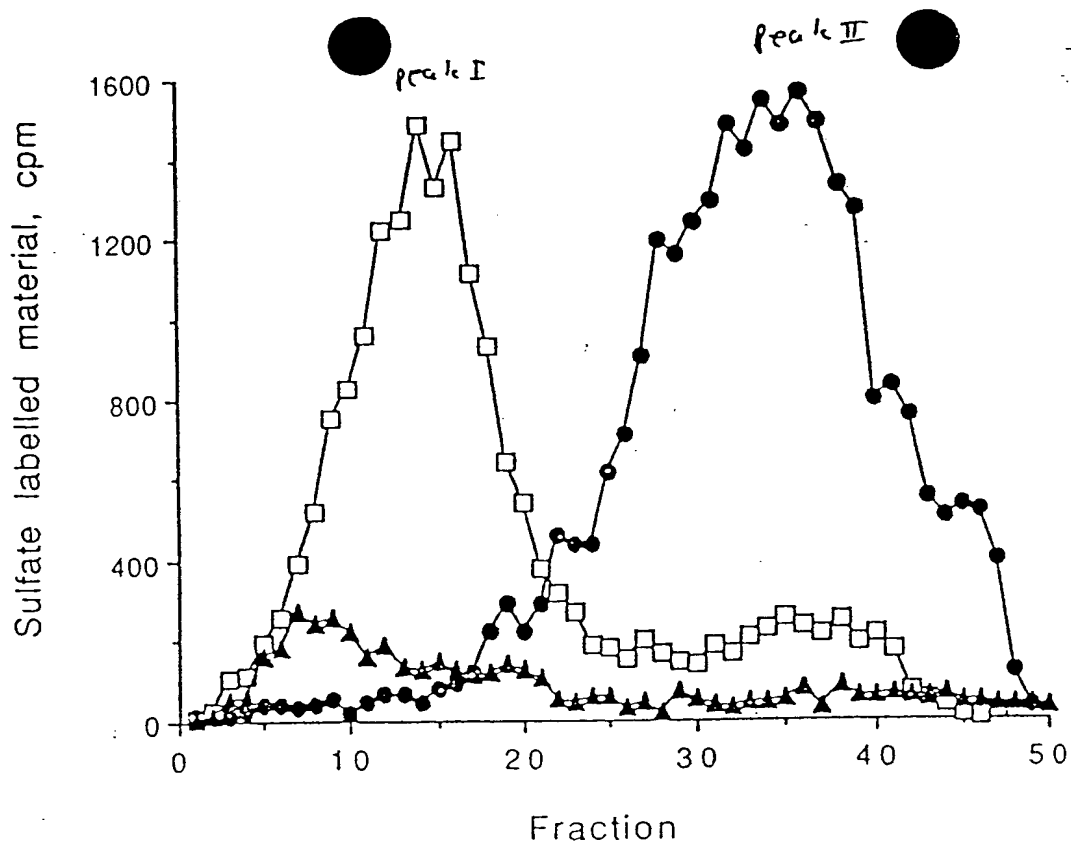


Fig. 6A

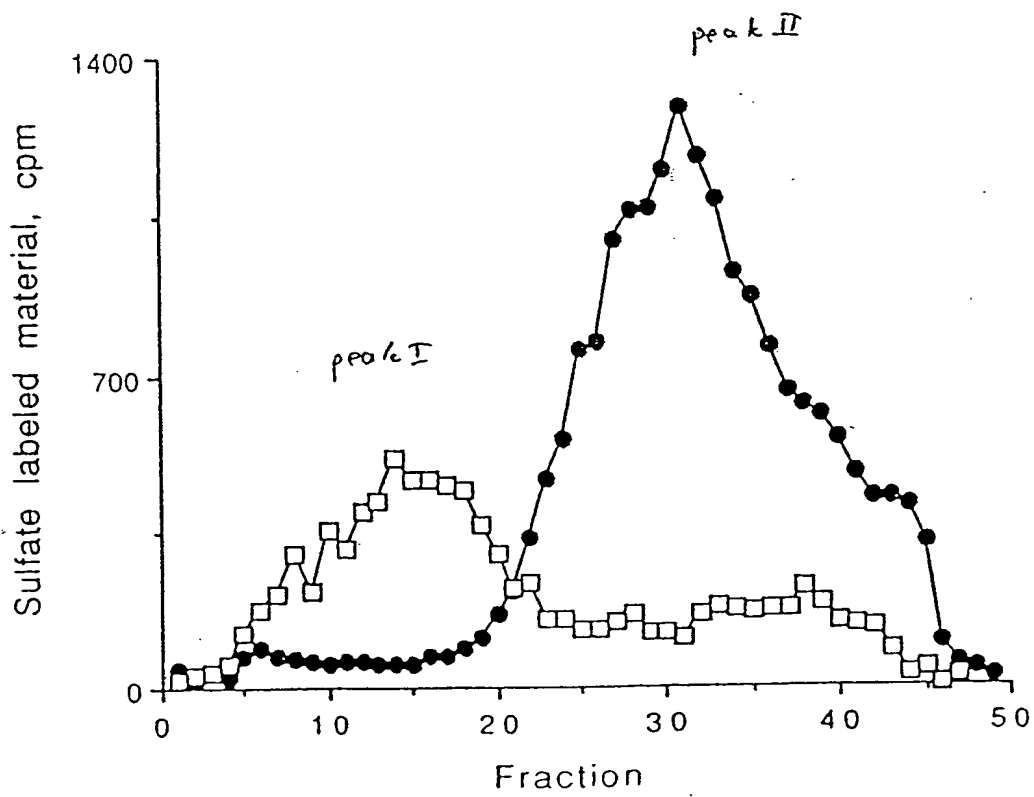


Fig. 6B

Graph showing the elution profile of a column chromatography experiment. The Y-axis represents Sulfate labeled material, cpm (0 to 1400). The X-axis represents Fraction (0 to 50). Two peaks are identified: peak I (around fraction 5) and peak II (around fraction 24).

| Fraction | Sulfate labeled material, cpm (Peak I, Squares) | Sulfate labeled material, cpm (Peak II, Circles) |
|----------|---|--|
| 0 | 0 | 0 |
| 2 | 200 | 50 |
| 4 | 1100 | 150 |
| 5 | 1350 | 250 |
| 6 | 1250 | 200 |
| 8 | 850 | 150 |
| 10 | 700 | 100 |
| 12 | 550 | 150 |
| 14 | 400 | 150 |
| 15 | 350 | 250 |
| 16 | 300 | 350 |
| 18 | 200 | 700 |
| 20 | 150 | 1000 |
| 22 | 100 | 1250 |
| 24 | 50 | 1400 |
| 26 | 20 | 1250 |
| 28 | 10 | 1150 |
| 30 | 5 | 1050 |
| 32 | 2 | 750 |
| 34 | 1 | 550 |
| 36 | 0 | 450 |
| 38 | 0 | 400 |
| 40 | 0 | 350 |
| 42 | 0 | 300 |
| 44 | 0 | 150 |
| 46 | 0 | 50 |
| 48 | 0 | 20 |
| 50 | 0 | 10 |

peak II

Sulfate labeled material, cpm

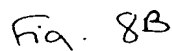
Fraction

Fig. 7B

Sulfate labeled material, cpm



Sulfate labeled material, cpm



1295660

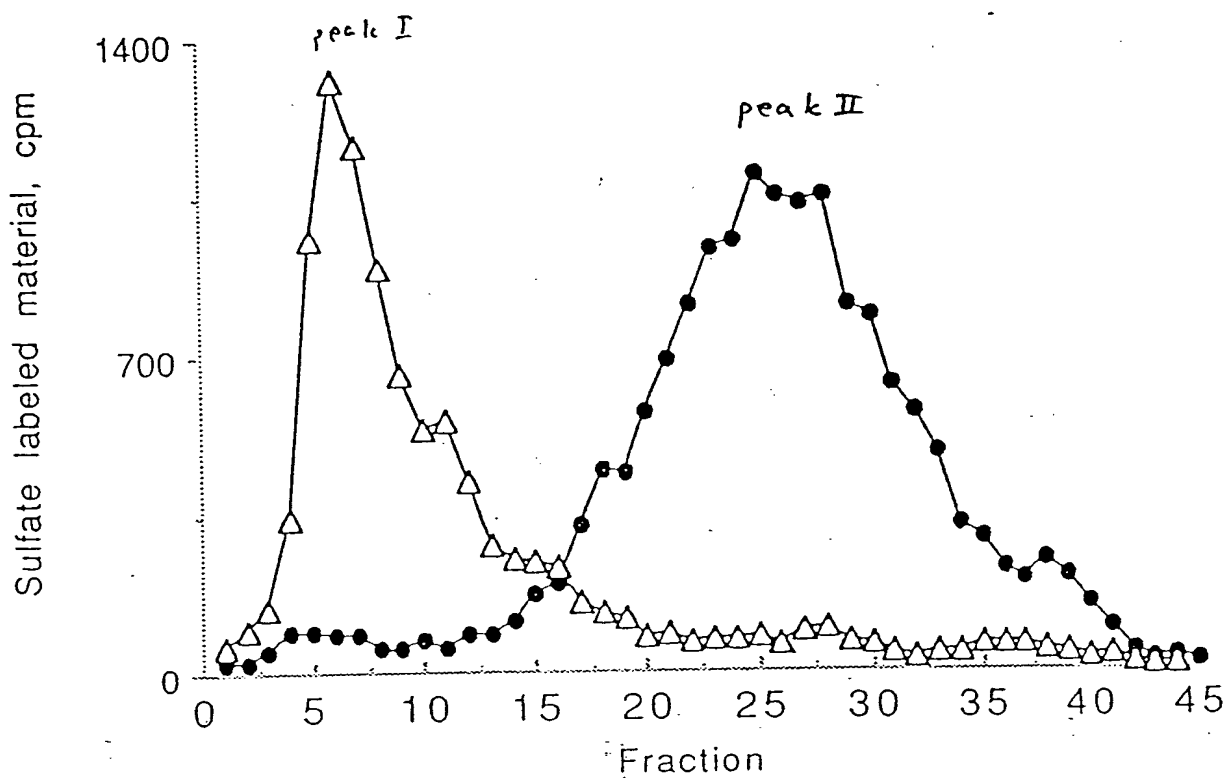


Fig. 9A

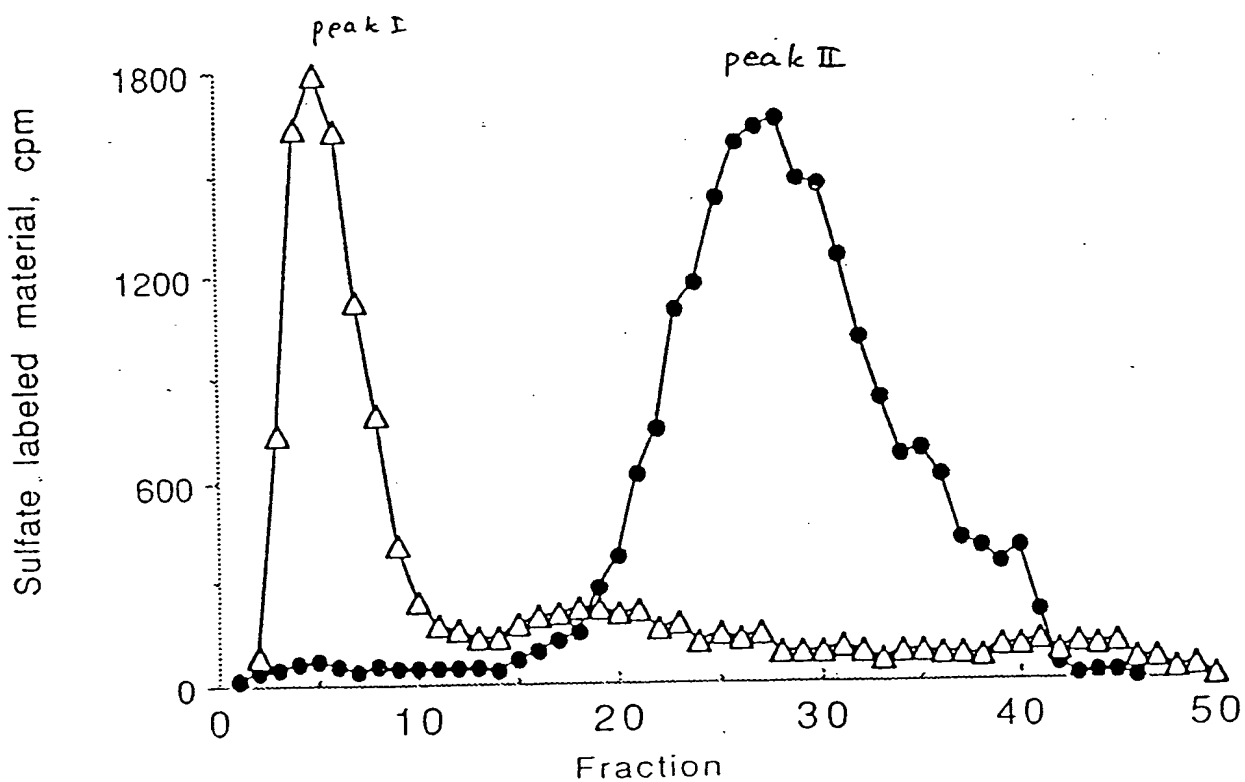


Fig. 9B

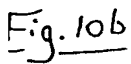
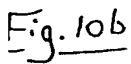
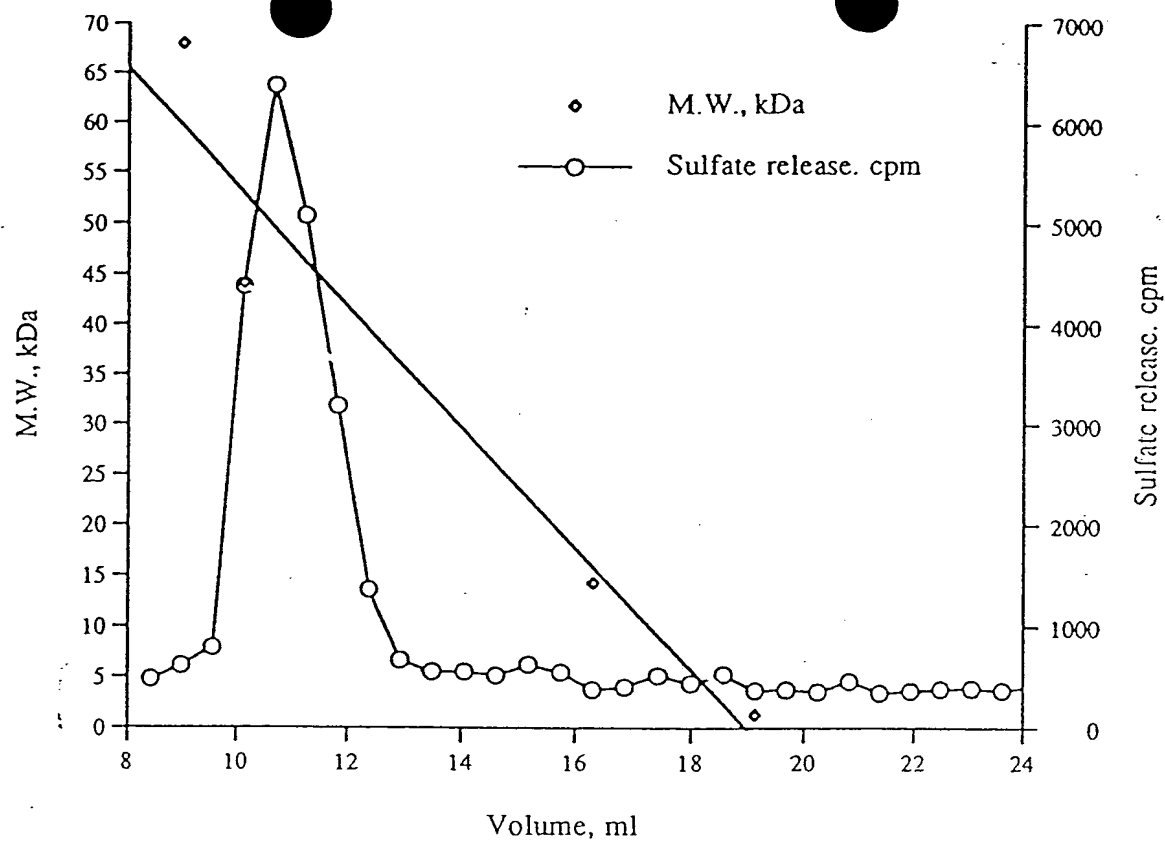
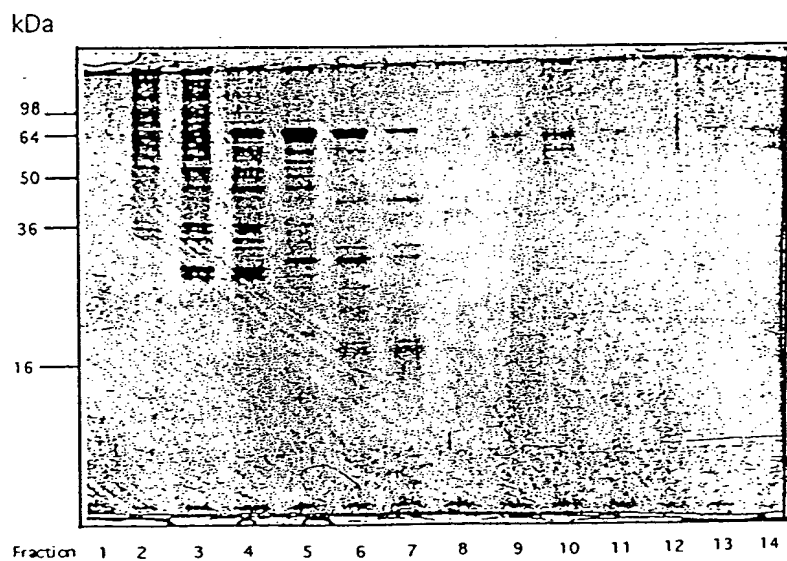
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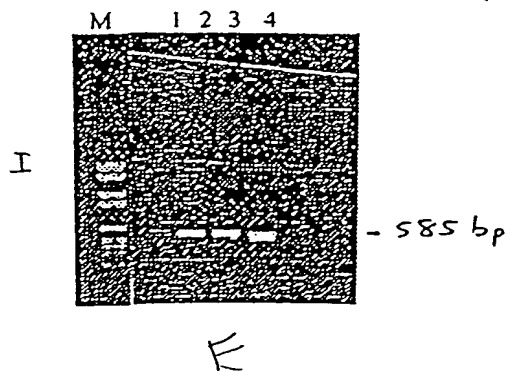
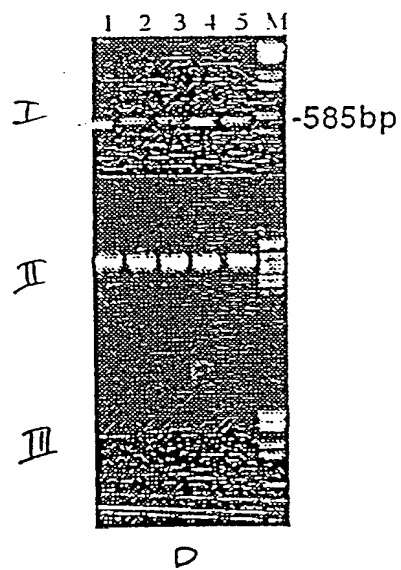
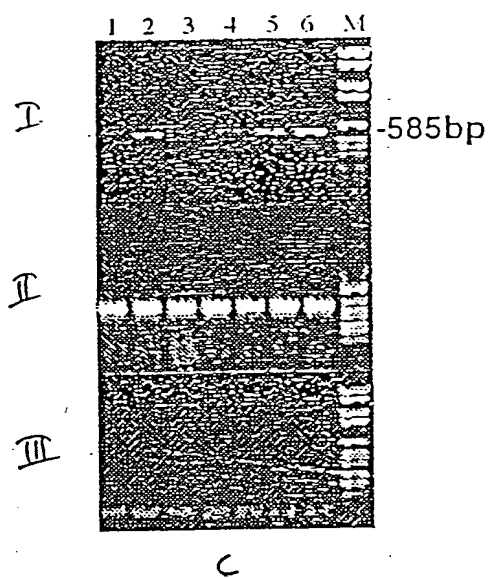
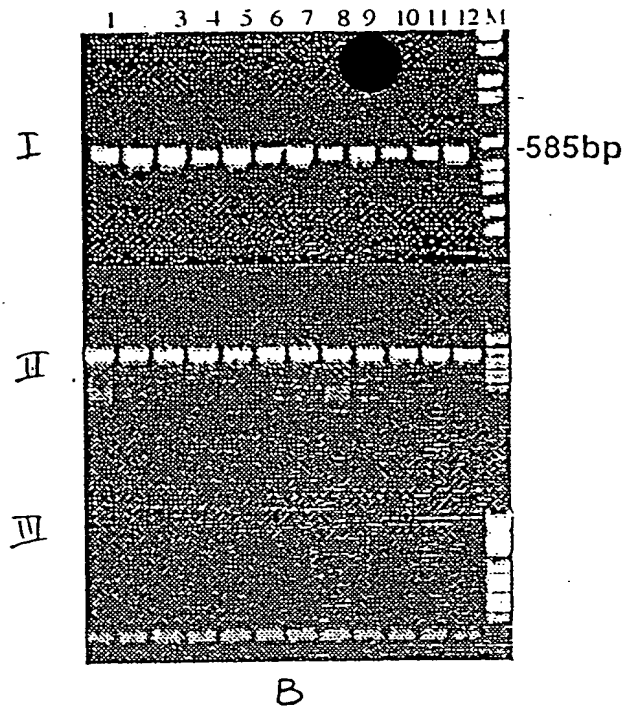
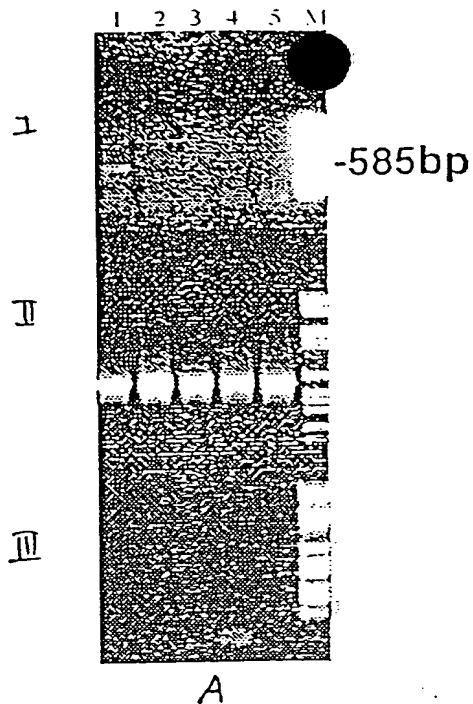
Fig. 11a



Gel-filtration

Fig. 11b





00776871 020604

Fig. 14

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

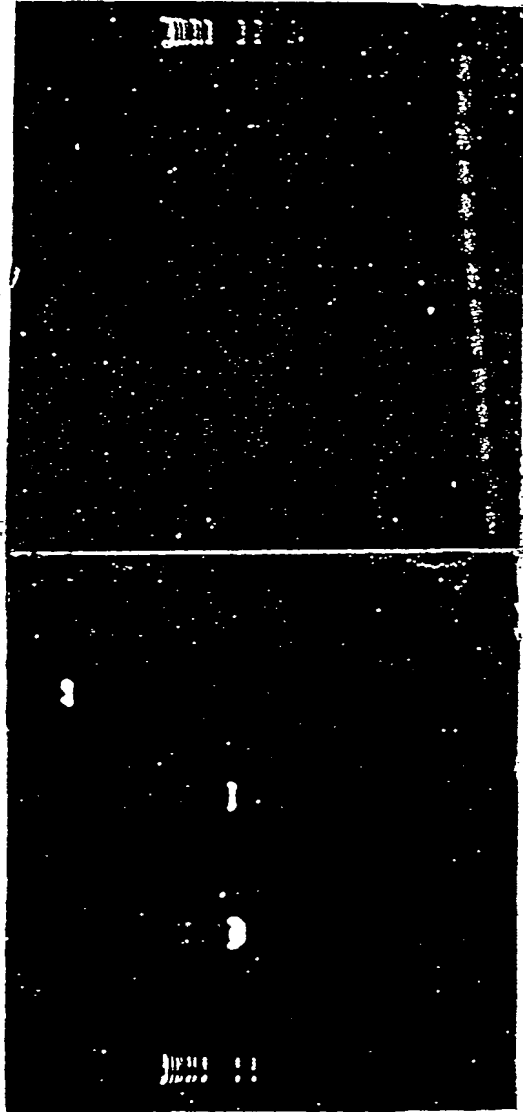
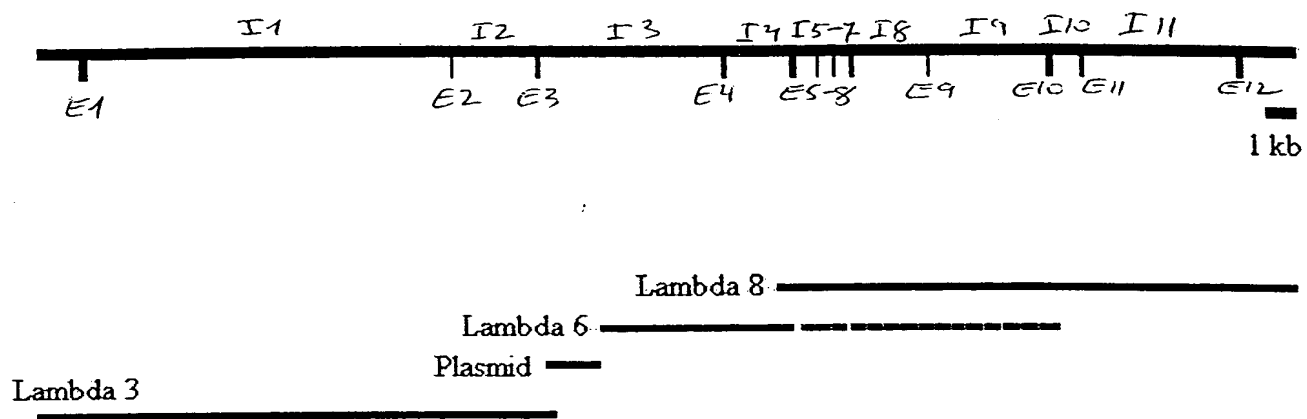


Figure 15



00703011 00000000

Figure 16

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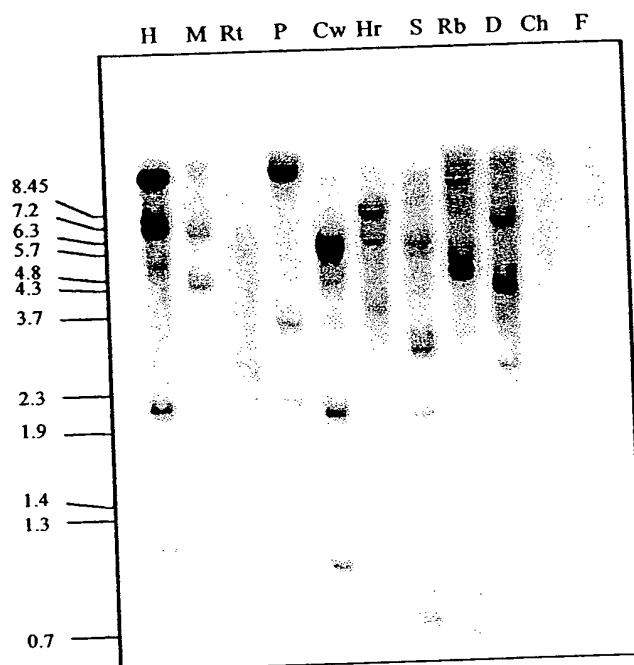
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|-------|--------------|-------------|--------------|--------------|--------------|
| | | | | | 50 |
| human | MLLRSKPALP | PPLMLLLLGP | LGPLSPGALP | RPAQAQDVVD | LDDFTQEP LH |
| mouse | ~~~~~ML | RLLLLWLWGP | LGALAQGAPA | GTAPTDDVVD | LEFYTKRPLR |
| rat | ~~~~~ | ~LLLLWLWGR | LRALTQGT PA | GTAPT KD VVD | LEFYTKR LFQ |
| | | | | | 100 |
| human | LVSPSFLSVT | IDANLATDPR | FLILLGSPKL | RTLARGLSPA | YLRFGGTKTD |
| mouse | SVSPSFLSIT | IDASLATDPR | FLTFLGSPRL | RALARGLSPA | YLRFGGTKTD |
| rat | SVSPSFLSIT | IDASLATDPR | FLTFLSSPRL | RALSRGLSPA | YLRFGGTKTD |
| | | | | | 150 |
| human | FLIFDPKKES | TFEERSYWQS | QVNQDICKYG | SIPPDVEEKL | RLEWPHYQEQ L |
| mouse | FLIFDPDKEP | TSEERSYWKS | QVNHDICRSE | PVSAAVLRKL | QVEWPFQELL |
| rat | FLIFDPNNEP | TSEERSYWQS | QDNNDICGSD | RVSADVL~~~ | ~~~~~ |
| | | | | | 200 |
| human | LLREHYQKKE | KNSTYSRSSV | DVLYTFANCS | GLDLIFGLNA | LLRTADLQWN |
| mouse | LLREQYQKEF | KNSTYSRSSV | DMLYSFAKCS | GLDLIFGLNA | LLRTPDLRWN |
| rat | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ |
| | | | | | 250 |
| human | SSNAQLLLDY | CSSKGYNI SW | ELGNEPNSFL | KKADIFINGS | QLGEDYIQLH |
| mouse | SSNAQLLLDY | CSSKGYNI SW | ELGNEPNSFW | KKAHILIDGL | QLGEDFVELH |
| rat | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ |
| | | | | | 300 |
| human | KLLRKSTFKN | AKLYGPDVGQ | PRRKTAKMLK | SFLKAGGEVI | DSVTWHHHYYL |
| mouse | KLLQRSASFQ N | AKLYGPDIGQ | PRGKTVKLLR | SFLKAGGEVI | DSL TWHHHYYL |
| rat | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ |
| | | | | | 350 |
| human | NGRTATREDF | LNPDVLDIFI | SSVQKV FQV V | ESTRPGKKVW | LGETSSAYGG |
| mouse | NGRIATKEDF | LSSDALDTFI | LSVQKILKVT | KEITPGKKVW | LGETSSAYGG |
| rat | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ |
| | | | | | 400 |
| human | GAPLLSDTFA | AGFMWLDKLG | LSARMGIEVV | MRQVFFGAGN | YHLVDENEDP |
| mouse | GAPLLSNTFA | AGFMWLDKLG | LSAQMGIEVV | MRQVFFGAGN | YHLVDENFEP |
| rat | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ |
| | | | | | 450 |
| human | LPDYWLSLLF | KKLVGTVKVM | ASVQGSKR RK | LRVYLHCTNT | DNPRYKEGDL |
| mouse | LPDYWLSLLF | KKLVGPRVLL | SRVKGPDRSK | LRVYLHCTNV | YHPRYQEGDL |
| rat | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ |
| | | | | | 500 |
| human | TLYAINLHNV | TKYLRLPYPF | SNKQVDKYLL | RPLGPHGLLS | KSVQNLGLTL |
| mouse | TLYVLNLHNV | TKHLKVPPPL | FRKPVDTYLL | KPSGPDGLLS | KSVQNLNGQIL |
| rat | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~ | ~~~~~L |
| | | | | | 543 |
| human | KMVDQTLPP | IMEKPLRPGS | SLGLPAFSYS | FFVIRNAKVA | ACI~ |
| mouse | KMVDEQTLPA | LTEKPLPAGS | ALSLPAFSYG | FFVIRNAKIA | ACI~ |
| rat | KMVDEQTXPA | LTEKPLPAGS | SLSVPAFSYG | FFVIRNAKIA | ACI~ |

Figure 18



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